Docket No. 0505-1244P Appl. No.: 10/658,263

> Art Unit: 3747 Page 2 of 15

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A four-cycle engine comprising:

a cylinder block;

a cylinder head;

a cylinder head cover, wherein said cylinder head cover is stacked on top of said cylinder head and said cylinder head is stacked above said cylinder

block;

an intake valve and an exhaust valve opening or closing along respective

longitudinal axes by an operative engagement with a camshaft arranged above

the cylinder head;

a joint being formed between the cylinder head and cylinder block,

wherein the joint of between the cylinder head and the cylinder block extends

diagonally with respect to either the longitudinal axes of the intake valve or the

longitudinal axis of the exhaust valve; and

a joint being formed between the cylinder head and the cylinder head

cover, wherein the longitudinal axis of either the intake valve or the exhaust

valve is perpendicular to the joint between the cylinder head and the cylinder

head cover.

2. (CURRENTLY AMENDED) A four-cycle engine comprising: The four-

cycle engine according to claim 1, further comprising

Docket No. 0505-1244P

Appl. No.: 10/658,263 Art Unit: 3747

Page 3 of 15

a cylinder block;

a cylinder head;

a cylinder head cover, wherein said cylinder head cover is stacked on top

of said cylinder head and said cylinder head is stacked above said cylinder

block;

an intake valve and an exhaust valve opening or closing by an operative

engagement with a camshaft arranged above the cylinder head;

a joint being formed between the cylinder head and cylinder block,

wherein the joint of the cylinder head and the cylinder block extends diagonally

with respect to an axis of either the intake valve or the exhaust valve;

a joint being formed between the cylinder head and the cylinder head

cover, wherein the axis of either the intake valve or the exhaust valve is

perpendicular to the joint between the cylinder head and the cylinder head

cover; and

an insertion hole having an ignition plug formed therein, wherein an axis

of the insertion hole of the ignition plug is formed perpendicular to the joint of

the cylinder head and the cylinder head cover.

3. (CURRENTLY AMENDED) A four-cycle engine comprising: The four-

cycle engine according to claim-1,

a cylinder block;

Docket No. 0505-1244P Appl. No.: 10/658,263

Art Unit: 3747

Page 4 of 15

a cylinder head;

a cylinder head cover, wherein said cylinder head cover is stacked on top

of said cylinder head and said cylinder head is stacked above said cylinder

block;

an intake valve and an exhaust valve opening or closing by an operative

engagement with a camshaft arranged above the cylinder head;

a joint being formed between the cylinder head and cylinder block,

wherein the joint of the cylinder head and the cylinder block extends diagonally

with respect to an axis of either the intake valve or the exhaust valve;

a joint being formed between the cylinder head and the cylinder head

cover, wherein the axis of either the intake valve or the exhaust valve is

perpendicular to the joint between the cylinder head and the cylinder head

cover; and wherein each axis of the exhaust valve and the an exhaust valve

seat is perpendicular to the joint of the cylinder head and the cylinder head

cover.

4. (ORIGINAL) The four-cycle engine according to claim 2, further

comprising a rocker arm shaft having a pair of forked ends extending around a

plug tube of said ignition plug, wherein the forked ends of the rocker arm shaft

are supported by a rocker arm shaft holder integrally connected with the

cylinder head.

Response to Office Action of September 20, 2004 Appl

Appl. No.: 10/658,263 Art Unit: 3747

Docket No. 0505-1244P

Page 5 of 15

5. (ORIGINAL) The four-cycle engine according to claim 4, further

comprising a cam cap securing the rocker arm shaft, wherein the rocker arm

shaft is secured by a bolt fastening the cam cap in a rocker arm shaft holder.

5. (ORIGINAL) The four-cycle engine according to claim 5, further

comprising a female tapped hole for securing the bolt within the rocker arm

shaft holder, wherein an axis of the female tapped hole is perpendicular to the

joint between the cylinder head and the cylinder head cover.

7. (ORIGINAL) The four-cycle engine according to claim 6, further

comprising an insertion hole having an ignition plug formed therein, wherein

an axis of the insertion hole of the ignition plug is formed perpendicular to the

joint of the cylinder head and the cylinder head cover.

8. (CURRENTLY AMENDED) A four-cycle engine comprising: The four-

cycle engine according to claim 1, further comprising

a cylinder block;

a cylinder head;

Docket No. 0505-1244P Appl. No.: 10/658,263

Art Unit: 3747

Page 6 of 15

a cylinder head cover, wherein said cylinder head cover is stacked on top

of said cylinder head and said cylinder head is stacked above said cylinder

block;

an intake valve and an exhaust valve opening or closing by an operative

engagement with a camshaft arranged above the cylinder head;

a joint being formed between the cylinder head and cylinder block,

wherein the joint of the cylinder head and the cylinder block extends diagonally

with respect to an axis of either the intake valve or the exhaust valve;

a joint being formed between the cylinder head and the cylinder head

cover, wherein the axis of either the intake valve or the exhaust valve is

perpendicular to the joint between the cylinder head and the cylinder head

cover; and

an intake port and an exhaust port, wherein the joint of the cylinder

head and the cylinder head cover is inclined downward from an intake port

side of the cylinder head toward an exhaust port side of the cylinder head.

9. (ORIGINAL) The four-cycle engine according to claim 8, further

comprising an engine hanger being integrally formed with the cylinder head in

a position above the intake port of the cylinder head and in a vicinity of the

joint between the cylinder head and the cylinder head cover.

Docket No. 0505-1244P Appl. No.: 10/658,263

Art Unit: 3747

Page 7 of 15

10. (ORIGINAL) The four-cycle engine according to claim 7, further

comprising an intake port and an exhaust port, wherein the joint of the

cylinder head and the cylinder head cover is inclined downward from an intake

port side of the cylinder head toward an exhaust port side of the cylinder head.

11. (ORIGINAL) The four-cycle engine according to claim 10, further

comprising an engine hanger being integrally formed with the cylinder head in

a position above the intake port of the cylinder head and in a vicinity of the

joint between the cylinder head and the cylinder head cover.

12. (ORIGINAL) The four-cycle engine according to claim 1, further

comprising a valve train, wherein said valve train is a Single Overhead

Camshaft (SOHC) valve train having a single overhead camshaft.

13. (ORIGINAL) The four-cycle engine according to claim 2, further

comprising a valve train, wherein said valve train is a Single Overhead

Camshaft (SOHC) valve train having a single overhead camshaft.

14. (ORIGINAL) The four-cycle engine according to claim 9, further

comprising a valve train, wherein said valve train is a Single Overhead

Camshaft (SOHC) valve train having a single overhead camshaft.

Docket No. 0505-1244P Appl. No.: 10/658,263

Art Unit: 3747

Page 8 of 15

15. (ORIGINAL) The four-cycle engine according to claim 11, further

comprising a valve train, wherein said valve train is a Single Overhead

Camshaft (SOHC) valve train having a single overhead camshaft.

16. (ORIGINAL) The four-cycle engine according to claim 2, further

comprising a valve train, wherein said valve train is a dual overhead camshaft

(DOHC) valve train having dual overhead camshafts.

17. (ORIGINAL) The four-cycle engine according to claim 9, further

comprising a valve train, wherein said valve train is a dual overhead camshaft

(DOHC) valve train having dual overhead camshafts.

18. (ORIGINAL) The four-cycle engine according to claim 11, further

comprising a valve train, wherein said valve train is a Single Overhead

Camshaft (SOHC) valve train having a single overhead camshaft.